

Recovery Plan Action Status

Plan Name: Recovery Plan for *Juglans jamaicensis* Nogal or West Indian Walnut

Plan Status: Final

Plan Date: 09-Dec-99

Lead Agency: USFWS

Lead Office: Caribbean Ecological Services Field Office

(887)
851-7297)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	1	111	Develop a landowner agreement which provides for the long term protection and recovery of <i>Juglans jamaicensis</i> .	Obsolete			U.S. Fish and Wildlife Service, Ecological Services Division, Puerto Rico Department of Natural and Environmental Resources	Management, Management: Identify/Protect Foraging, Breeding and Mig Habitats	Internal Administrative	DNER acquired the land
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	1	121	Monitor known populations.	Ongoing Current	FY 2000 - FY 2004	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, Puerto Rico Department of Natural and Environmental Resources	Management: Population Monitoring	Internal Field Assistance	DNER (Guilarte Forest manager) performs this action.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	1	122	Enforce existing Commonwealth and Federal endangered species regulations.	Ongoing Current	FY 2000 - FY 2004	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, Law Enforcement Division, Puerto Rico Department of Natural and Environmental Resources	Other: Information and Education, Other: Law Enforcement	Internal Field Assistance	DNER performs these actions.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	123	Educate the public on plant conservation values and regulations.	Ongoing Current	FY 2000 - FY 2004	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Fish and Wildlife Service, Law Enforcement Division, Puerto Rico Department of Natural and Environmental Resources	Other: Information and Education	Species Expert, Volunteer	Information regarding the species is included in public education programs.

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West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	211	Identify and inventory potential sites.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Puerto Rico Department of Natural and Environmental Resources	Research: Other Information	Contract, Species Expert	Task duration: 2-4 years.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	212	Characterize sites to determine their suitability as future recovery sites.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Habitat Requirements	Graduate Student, Species Expert	Task duration: 2-4 years.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	31	Define habitat requirements.	Unknown			U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Habitat Requirements	Graduate Student, Species Expert	Task duration: 2-4 years.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	321	Assess periodicity of flowering.	Unknown			U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Propagation	Graduate Student, Species Expert	6K/yr includes 321, 322, 323, 324, and 325. Task duration: 2-4 years.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	322	Assess seed production and dispersal.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Propagation	Graduate Student, Species Expert	Task duration: 2-4 years.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	323	Evaluate seed viability and germination requirements.	Partially Complete	FY 2000 - FY 2004	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Propagation	Graduate Student, Internal Field Assistance, Species Expert	Task duration: 2-4 years. DNER is performing this action

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West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	324	Evaluate requirements for establishment and growth.	Partially Complete	FY 2000 - FY 2004	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Propagation	Graduate Student, Internal Field Assistance, Species Expert	Task duration: 2-4 years DNER is performing this action.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	325	Determine genetic structure of the species.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Genetics	Graduate Student, Species Expert	Task duration: 2-4 years.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	331	Assess methods of propagation.	Partially Complete	FY 2000 - FY 2004	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, Botanical Gardens, Universities, Puerto Rico Department of Natural and Environmental Resources, Puerto Rico Conservation Foundation	Research: Propagation	Graduate Student, Internal Field Assistance, Species Expert, Volunteer	Task duration: 2-4 years. DNER and UPR-Rio Piedras are performing this action.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	332	Develop artificial propagation program	Ongoing Current	FY 2006	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, Botanical Gardens, Universities, Puerto Rico Department of Natural and Environmental Resources, Puerto Rico Conservation Foundation	Management: Propagation	Contract, Internal Technical Assistance, Species Expert, Volunteer	
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	411	Select sites and assess habitat suitability.	Not Started			Universities, Puerto Rico Department of Natural and Environmental Resources, Puerto Rico Conservation Foundation	Management: General	Contract, Species Expert	Task duration: 2-4 years.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	412	Ensure site protection.	Complete			U.S. Fish and Wildlife Service, Ecological Services Division, Puerto Rico Department of Natural and Environmental Resources	Management: Land Use	Internal Field Assistance	DNER acquired lands.

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West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	413	Introduce and monitor plants.	Ongoing Not Current	FY 2006	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, Puerto Rico Department of Natural and Environmental Resources	Management: Population Monitoring, Management: Reintroduction	Contract, Graduate Student, Internal Field Assistance, Species Expert, Volunteer	Task duration: 2-4 years.
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	51	Determine number of individuals and populations necessary to ensure species stability and self-perpetuation.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Population Assessment	Graduate Student, Species Expert	
West Indian Walnut (=Nogal) (<i>Juglans jamaicensis</i>)	2	52	Determine what additional actions are needed to achieve recovery criteria.	Ongoing Current			U.S. Fish and Wildlife Service, Ecological Services Division, Universities, Puerto Rico Department of Natural and Environmental Resources	Research: Other Information	Graduate Student, Species Expert	